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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,038	10/31/2000	Tony M. Brewer	59182-P004US-10020641	8896
20529	7590	11/13/2007		
NATH & ASSOCIATES 112 South West Street Alexandria, VA 22314			EXAMINER SAM, PHIRIN	
			ART UNIT 2619	PAPER NUMBER
			MAIL DATE 11/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/703,038

Applicant(s)

BREWER ET AL.

Examiner

Phirin Sam

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 63-88 and 90-125 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 88 and 90-111 is/are allowed.
- 6) ☒ Claim(s) 63,66,68-71,78-80,82,85-87,112,114-122 and 124 is/are rejected.
- 7) ☒ Claim(s) 64,65,67,73-77,81,83,84,113,123 and 125 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



PHIRIN SAM  
PRIMARY EXAMINER

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 63, 66, 68-71, 78-80, 82, 85-87, 112, 114-122, and 124 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,463,506 (hereinafter after referred as "McAllister") in view of US Patent 6,829,437 (hereinafter after referred as "Kirby").

**Regarding claims 63, 66, 68-71, 78-80, 82, and 85-87,** McAllister discloses a method of passing Internet Protocol (IP) data packets through a network, said method comprising:

- (a) constructing a chunk as a substantially fixed quantity of data with a payload that is sized to fit more than one of said data packets (see Fig. 2, col. 6, lines 7-10);

Art Unit: 2619

(b) filling said payload of said chunk with a portion of at least one data packet (see Fig. 2, col. 6, lines 12-15);

(c) including a framing symbol in each said chunk (see Fig. 2, col. 6, lines 10-12);

McAllister does not disclose converting said chunk from electrical information into optical information and passing said chunk through an optical switch fabric. However, Kirby discloses converting said chunk from electrical information into optical information and passing said chunk through an optical switch fabric (see Figs. 1-3, col. 2, lines 66-67, col. 3, lines 1-15, col. 4, lines 40-67, and col. 6, lines 15-43). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine converting chunk from electrical information into optical information and passing the chunk through the optical switch fabric teaching by Kirby with McAllister. The motivation for doing so would have been to provide to reduce the amount of electronic data processing, which is typically the cause of severe bottlenecks read on column 1, lines 55-56. Therefore, it would have been obvious to combine Kirby and McAllister to obtain the invention as specified in the claims 63, 66, 68-71, 78-80, 82, and 85-87.

**Regarding claims 112, 114, 115-122, and 124,** McAllister discloses a method of information flow through an IP packet network system, said method comprising:

(a) encapsulating input data packets from a plurality of source ports into substantially fixed sized chunks, wherein said input data packets are electrical signals (see Fig. 2, col. 6, lines 7-10, and lines 12-15);

(b) formatting overhead information onto each of said chunks, said overhead including a framing symbol (see Fig. 2, col. 6, lines 10-12);

Art Unit: 2619

McAllister does not disclose electrically switching said chunks to be sent to an appropriate optical switch plane; converting said chunks into optical signals; and directing said chunks through said appropriate optical switch plane toward a plurality of destination ports. However, Kirby discloses electrically switching said chunks to be sent to an appropriate optical switch plane; converting said chunks into optical signals; and directing said chunks through said appropriate optical switch plane toward a plurality of destination ports (see Figs. 1-3, col. 2, lines 66-67, col. 3, lines 1-15, col. 4, lines 40-67, and col. 6, lines 15-43). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine electrically switching said chunks to be sent to an appropriate optical switch plane; converting said chunks into optical signals; and directing said chunks through said appropriate optical switch plane toward a plurality of destination ports teaching by Kirby with McAllister. The motivation for doing so would have been to provide to reduce the amount of electronic data processing, which is typically the cause of severe bottlenecks read on column 1, lines 55-56. Therefore, it would have been obvious to combine Kirby and McAllister to obtain the invention as specified in the claims 112, 114, 115-122, and 124.

***Allowable Subject Matter***

4. Claims 64, 65, 67, 72-77, 81, 83, 84, 113, 123, and 125 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claims 88 and 90-111 are allowed.

*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) US Patent 6,567,199 (Nakaoka et al) discloses digital optical transmission apparatus and method for performing ask modulation to generate base band component with constant dc level.

(2) US 2001/0046208 (Eng et al) discloses unbreakable optical IP flows and premium IP services.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on a compress schedule, from 8:00-5:30, first Wed off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272 - 2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2619

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: November 8, 2007

A handwritten signature in black ink, appearing to read 'Phirin Sam', written over a horizontal line.

**PHIRIN SAM  
PRIMARY EXAMINER**